REMARKS

Enclosed are sheets showing proposed drawing changes as follows:

Figure 4 changes numerals 42 to 56 and 44 to 58.

Figure 6a adds "PRIOR ART".

Figure 6b adds numeral 139.

The application has been amended to more clearly distinguish from the prior art of record, including the fact that the present invention is dealing with very low energy radiation, which in and of itself, creates poor Signal-to-Noise Ratio (SNR) created by the low charge yield per X-ray quantum combined with the high input capacitance, as pointed out in column 2 of our application. Neither Wessendorf nor Shimizu has the capacity to detect low energy analytical X-ray radiation as disclosed in the present application. Wessendorf detects radiation having energy levels 150 times that utilized in the current application and Shimizu detects radiation in the order of magnitude of 20 times, which is the usual energy used in medical computed tomography. These high levels of energy excite much greater numbers of electron-hole pairs, though their SNR problem is much smaller.

Further, Wessendorf does not have an array of detector elements, so he does not address the problem created with very small detector elements and the SNR problem connected to it.

Shimizu does in fact have an array of detector elements, but these detector elements are intended to provide an image of the human body, which means that those elements may be much larger than the ones in an analytical X-ray apparatus, and therefore, Shimizu does not address small detector element and the Signal-to-Noise Ratio problem connected with it.

As pointed out above, Wessendorf does not disclose an array of detector elements, and therefore, a person skilled in the art would not expect to find a solution for the problems created with small area detector elements in Wessendorf, and thus would reject Wessendorf as a possible solution for the problems of poor Signal-to-Noise Ratio.

Neither Wessendorf nor Shimizu addresses the problem of the reactive current, and this residual problem is connected to the Signal-to-Noise Ratio problem and the charge amplifiers accommodated on the same substrate as the digital signal processing unit.

Since the references relied upon by the examiner or cited by

the examiner do not deal with the problem addressed by the location and solved by the present invention, it is urged that the present application is in condition for allowance and notice thereof is respectfully solicited.

This is to request a two month extension of time. Enclosed is our check for $420.

The Commissioner is authorized to charge any deficiency or credit any over payment to Deposit Account 17-0900.

Respectfully submitted,
JENSEN & PUNTIGAM, P.S.

By _____
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RAJ:mw
206 448-3200
Enclosures: Postcard, 2 sheets of proposed replacement drawings